

What is claimed is:

1. An apparatus for generating uniform images of an active matrix organic light emitting diode (OLED) display device which consists of a plurality of pixel devices, each of the pixel devices comprising:

5 a switch unit having two input ends and an output end, the two input ends connecting respectively to a data line and a scan line;

 a storage unit having one end connecting to a supply line and another end connecting to the output end of the switch unit;

10 a driver unit having two input ends and an output end, one input end connecting to the supply line and another input end connecting to the output end of the switch unit; and

 an OLED having an anode and a cathode, the anode being connected to the output unit of the driver unit and the cathode being connected to a positive power supply;

15 wherein the positive power supply provides a voltage to increase the electric potential of the cathode and the anode of the OLED and the electric potential of the output end of the driver unit and reduce the voltage difference of the source electrode and the drain electrode (V_{sd}) of the driver unit during operation and keep the voltage difference of 20 the source electrode and the gate electrode (V_{sg}) unchanged.

2. The apparatus of claim 1, wherein the switch unit is a thin film transistor.
3. The apparatus of claim 1, wherein the driver unit is a thin film transistor.

4. The apparatus of claim 1, wherein the storage unit includes a capacitor.
5. A method for generating uniform images of an active matrix organic light emitting diode (OLED) display device which consists of a plurality of pixel devices, each of the pixel devices comprising a driver unit to drive an OLED to display, the method comprising steps of:
 - connecting a cathode of the OLED to a positive power supply to provide a voltage to increase the electric potential of the OLED;
 - reducing the voltage difference of the source electrode and the drain electrode (V_{sd}) of the driver unit during operation; and
 - 10 keeping the voltage difference of the source electrode and the gate electrode (V_{sg}) unchanged so that output current fluctuations of the driver unit decrease while the driver unit is ON when the threshold voltages are different due to characteristic variations of the driver unit.